

### Abstract

1 A system detects an incoming telephone call and routes the ring signal to a  
2 loudspeaker so that it can be heard at a distance from the telephony device. Once  
3 the incoming call has been acknowledged the incoming signal is routed to the  
4 headset. New incoming calls are identified by verifying the presence of unique  
5 characteristics that are found only in incoming calls. In a conventional telephone  
6 the unique characteristic can be a combination of frequencies which are part of the  
7 ring signal. The frequencies can be verified by using a bandpass filter which allows  
8 only frequencies centered around the ring frequency to pass. Therefore, if a signal  
9 of correct frequency is present it will pass through the bandpass filter and activate  
10 a switch that routes the signal to the loudspeaker.